

Discussion on Addressing the Transformational Challenges of the Electric Grid (Section 8008, “Pathways”)

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Electricity Advisory Board Meeting

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Section 8008 (H.R. 133, Energy Act of 2020)

Section 8008 – Establishment of Voluntary Model Pathways

In consultation with a Steering Committee [EAC with FERC and national lab representation] initiate the development of model pathways for modernizing the electric grid through a collaborative, public-private effort that:

- a) Produces illustrative policy pathways encompassing a diverse range of technologies that can be adapted for state and regional applications by regulators and policymakers,
- b) Facilitates the modernization of the electric grid and associated communications networks to achieve the objectives:
 - 1) Near-time situational awareness
 - 2) Advanced monitoring and control, and data visualization
 - 3) Enhanced certainty of policies for investment in the electric grid
 - 4) Increased innovation
 - 5) Greater consumer empowerment
 - 6) Enhanced reliability and resilience
 - 7) Improved integration of DER, interoperability, and predictive modeling/forecasting
 - 8) Diversification of generation resources
 - 9) Reduced cost of service to consumers
- c) Ensures a reliable, resilient, affordable, safe, and secure electric grid; and
- d) Acknowledges and accounts for different priorities, electric systems, and rate structures across States and regions.

Includes providing technical assistance



Steering Committee Effort/Process

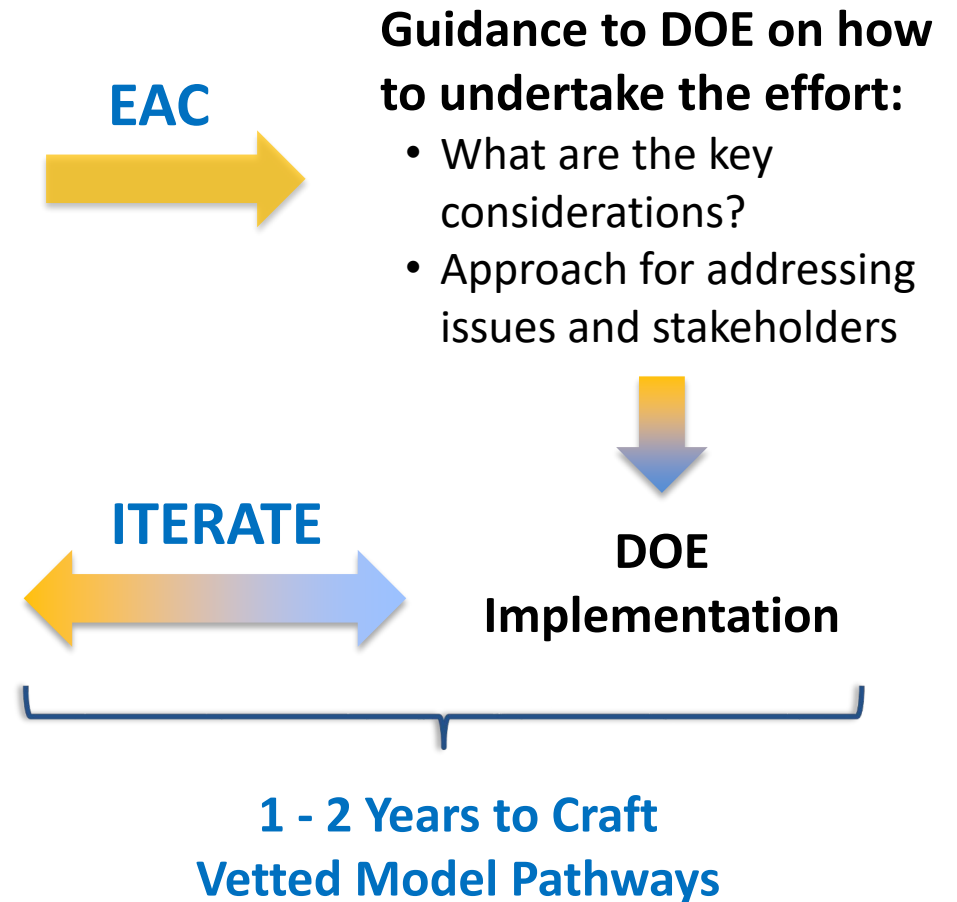
Steering Committee Deliverable by March 2022

Section 8008 Steering Committee

- Bob Cummings, Red Yucca Power Consulting
- Tom Bialek, Toumetis
- Flora Flygt, American Transmission Company, retired
- Darlene Phillips, PJM Interconnection
- Drew Fellon, Alliance Advisory Services
- Tom Weaver, American Electric Power Company, retired
- David Kathan, Federal Energy Regulatory Commission
- Bobby Jeffers, Sandia National Laboratory
- Jessica Lau, National Renewable Energy Laboratory
- Peter Larsen, Lawrence Berkeley National Laboratory

DOE:

Joe Paladino
Matt Aronoff
Chris Lawrence
ICF Support



Analytical Objective and Approach

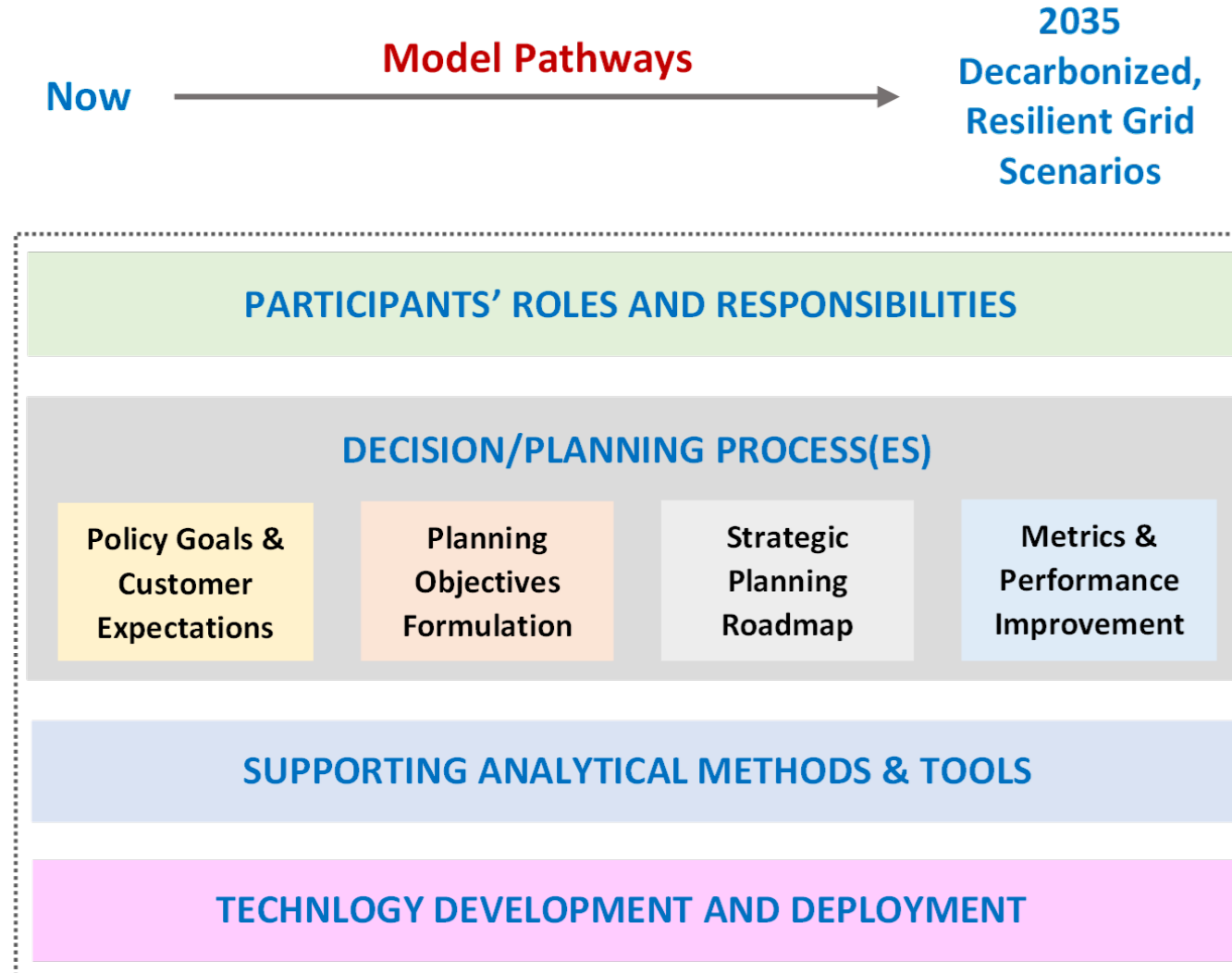
How do we get there? What are the transitional strategies?

Challenges:

1. Structure and function of the transmission system
2. Structure and function of the distribution system
3. Coordination of planning, operations, and markets across the transmission, distribution, and behind-the-meter domains

Given:

- Decarbonization, electrification, and equity goals
- Resilience and flexibility considerations
- Fragmented decision-making (no central planner) and uncertainty
- Urgency, including rapid technological pace



Discussion

